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10/664,725	09/18/2003	Manabu Nakatani	01-1395	4358

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EXAMINER	
HELM, CARALYNNE E	

ART UNIT	PAPER NUMBER
1615	

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02/26/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/664,725	NAKATANI ET AL.	
	Examiner	Art Unit	
	CARALYNNE HELM	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☒ This action is FINAL. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/9/08*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 6-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 11/560059 in view of Frisbee et al. Both the instant claim and those of the copending application claim a composition with telmisartan at 3-50 wt% in a dissolving matrix with a basic agent (at the same ratio relative to one another), a water-soluble diluent at 25-70 wt%, a surfactant at 1-20 wt%, and additional excipients such that all the components add to 100%. The basic agent is taught as to be chosen from the same collection of compounds, as are the water soluble diluent and additional

excipients. Further the pharmaceutical dosage unit is taught to comprise the same amount of telmisartan. Both applications also teach a bi-layered tablet with telmisartan in a dissolving layer and a diuretic in a disintegrating layer. Although the copending application teaches the same class of surfactants (poloxamers), it does not teach a particular molecular weight range for them. Frisbee teaches the use of poloxamers in the weight range of 7680 to 9510, as being particularly effective as a solubilizer in a pharmaceutical composition (see page 5 lines 27-28). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Frisbee et al. in copending Application No. 11/560059 to select a particular poloxamer as the surfactant.

This is a provisional obviousness-type double patenting rejection.

Applicant's remarks regarding the provisional ODP rejection are non-responsive. The provisional nature of the rejection does not obviate applicant's obligation to either traverse the rejection or file a Terminal disclaimer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 and 6-14 are rejected under 35 U.S.C. 103(a) as being obvious over Friedl et al. (US 2005/0089575) in view of Frisbee et al (WO 99/17744).

Friedl et al. teach a pharmaceutical composition tablet comprising telmisartan and a diuretic (see title), where the telmisartan is present in a dissolving layer and the diuretic is present in a disintegrating layer (see paragraph 15; instant claims 10 and 13). More specifically, Friedl et al. teach the composition as providing a dosage unit of 10-160 mg of telmisartan and comprising 3-50 wt% telmisartan (see paragraph 49; instant claims 1 and 11-12). This dosage unit also has a basic agent at 0.25-20 wt% such as alkali metal hydroxides like NaOH and KOH, basic amino acids, or meglumine (see paragraph 46; instant claims 1-3), where the molar ratio of telmisartan to basic agent is exemplified at nearly 2 to 1 (see example 4; instant claim 1). The dosage unit further comprises a water soluble diluent at 60-80 wt% such as carbohydrates like glucose, oligosaccharides like sucrose, and sugar alcohols like sorbitol (see paragraph 47 and

49; instant claims 1 and 7-8), Pluronic®, a trade name for a set of polyoxamers (also known as poloxamers), at 0-10 wt% (see paragraphs 55, 58, and 63; instant claim 1), and from 0-30% of other additional lubricants, binders, flow control agents, crystallization retarders, solubilizers and color agents (see paragraphs 51-58; instant claim 9). Friedl et al. does not specifically teach the Pluronic® (poloxamer) having an average molecular weight of 2000-12000.

Frisbee et al. teach an immediate release dosage form where a variety of drugs can be utilized and within this context also teach that poloxamers (polyoxamers) are commonly known commercially available solubilizers (see abstract and page 5 lines 13-14 and 20-25). Frisbee et al. also teach that poloxamer 188, whose average molecular weight is between 7680 and 9510, is particularly effective as a solubilizer (see page 5 lines 27-28). In view of these teachings, it would have been obvious to one of ordinarily skill in the art at the time the invention was made to use poloxamer 188 as the particular solubilizer in the invention of Friedl et al.

Friedl et al. teach multiple methodologies for the production of telmisartan material used to make tablets. One embodiment in view of Frisbee et al. involves the spray drying of an aqueous solution containing telmisartan at 3-50 wt%, basic agents at 0.25-20 wt% and Pluronic® (poloxamer 188) at 1-10 wt% (see paragraphs 55, 49, 63 line 11, 84, and 85 line 1; instant claim 14). The granulate from the spray drying process is mixed with water soluble diluent at 30-95 wt% along with a lubricant at 0.1-5 wt% (see paragraphs 91-93; instant claim 14). The resulting mixture can also contain

other excipients and adjuvants (see paragraphs 51-58; instant claim 14). Therefore claims 1-3 and 6-14 are obvious over Friedl et al. in view of Frisbee et al.

Claims 1, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedl et al. in view of Frisbee et al. as applied to claims 1-3 and 6-13 above, and further in view of Gennaro (Remington: The Science and Practice of Pharmacy Volume II), Parikh (Handbook of Pharmaceutical Granulation Technology), and the EPA Profile of the Pharmaceutical Manufacturing Industry.

Friedl et al. teach multiple methodologies for the production of telmisartan material used to make tablets. One embodiment, in view of Frisbee et al. involves the spray drying of an aqueous solution containing telmisartan at 3-50 wt%, basic agents at 0.25-20 wt% and Pluronic® (poloxamer 188) at 1-10 wt% (see paragraphs 55, 49, 63 line 11, 84, and 85 line 1; instant claim 14). The granulate from the spray drying process is mixed with water soluble diluent at 30-95 wt% along with a lubricant at 0.1-5 wt% (see paragraphs 91-93; instant claim 14). The resulting mixture can also contain other excipients and adjuvants (see paragraphs 51-58; instant claim 14). Although not specifically disclosed by Friedl et al., Parikh teaches that ethanol is also a commonly used solvent in spray drying techniques (see page 92 paragraph 1 line 3; instant claim 14); thus one of ordinary skill in the art at the time the invention was made would have found it obvious to employ ethanol as an additional solvent in the system.

Another embodiment of the invention taught by Friedl at el. in view of Frisbee et al. employs the coating of carrier particles in a fluidized bed with the aqueous solution of

telmisartan (see paragraph 38 lines 1-4). One of ordinary skill in the art at the time the invention was made would have readily recognized that fluidized bed granulation would meet this recitation (granulating solution is sprayed (coated) onto suspended (fluidized) particles which then dry rapidly in the suspending air – see Gennaro page 1625 column 2 paragraph 1 lines 1-4). As Friedl et al. clearly envisioned the combination of the water soluble diluent with the alkaline solution of telmisartan and its solubility enhancer (see paragraphs 55, 49, 63 line 11, 84, 85 line 1, and 91-93), one of ordinary skill in the art at the time the invention was made would have found it obvious to use the water soluble diluent already specified by the formulation as the "carrier particles in a fluidized bed" and the alkaline solution of telmisartan with poloxamer 188 as the granulating solution. The EPA Profile of the Pharmaceutical Manufacturing Industry teaches that ethanol is a common solvent used in the pharmaceutical industry, so it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ ethanol as an additional solvent in the fluidized bed granulation of the composition of Friedl et al. in view of Frisbee et al. (see page 41 paragraph 2 line 13). As taught by Gennaro, the process of fluidized bed granulation involves the drying of the coated granulate (see page 1625 column 2 paragraph 1 lines 4-6). Since the particles that result from the granulation that occurs in the fluidized bed may be larger than amenable to later tablet formation (see Parikh page 244), an artisan of ordinary skill would appreciate the need to employ some methodology (e.g. milling) to reduce the particle size. The resulting mixture can also contain other excipients and adjuvants (see Friedl et al. paragraphs

51-58). Thus, claims 1-3 and 6-15 are obvious over Friedl et al. in light of Frisbee et al., Gennaro, Parikh, and the EPA Profile of the Pharmaceutical Manufacturing Industry.

Response to Arguments

Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive.

Applicant argues that Friedl et al. do not teach that use of "poloxamers having an average molecular weight of about 2000 to 12000" and that these polymers produce an unexpected and valuable advantage. The previous office action already stated that Friedl et al. did not teach the molecular weight of the poloxamers it contemplates in their composition. Friedl et al. do teach that these compounds are contemplated as drug solubilizers. Frisbee et al., whose teachings are also relied upon in the rejections, also teach these compounds as drug solubilizers. Thus it is certainly not unexpected that the presence of a Pluronic® (poloxamer) improves the dissolution of a drug from a drug particle.

Applicant argues that the composition of Friedl et al. is unsuitable for fluid bed granulation because of the preferred amount of optional surfactant and that this preferred amount is different than that of the present invention. The assertion by these arguments that the composition of Friedl et al. is unsuitable for fluid bed granulation is not supported by any evidence. Even as an optional component, the mere fact that Friedl et al. name particular optional components indicates that they were contemplated as part of the composition. Further, a taught preference is not an exclusion or teaching

away from things outside the preferred range. In the case of the teachings of Friedl et al., both the taught and preferred range for the Pluronic® component lies within the claimed range. Specifically, Friedl et al. classify the Pluronic® as a solubilizer which is taught present at 1-10 wt% and more preferably at 2-8 wt% (note both ranges lie within the recited 1-20 wt% of instant claim 1) (see paragraphs 55 and 63).

Applicant argues that the coating of carrier particles taught by Friedl et al. is not the same as the fluid-bed granulation claimed. The description of fluid bed granulation provided by Gennaro teaches steps (spray a granulating solution on particles suspended in a fluidized bed that then rapidly dry in the suspending air) that align with those taught by Friedl et al. in view of Frisbee et al. (see page 6 second paragraph above).

Applicant also argues that there would not have been reason to combine Frisbee et al. with Friedl et al. nor a reasonable expectation of success. Frisbee et al. teach rapid release drug formulations for drugs that are not readily soluble in water. Telmisartan is one such drug that is taught in the composition of Friedl et al. So the combination of Frisbee et al. with Friedl et al would have been reasonable and would have had a reasonable expectation of success.

Finally, applicant argues against the combination of Gendron et al. with the other references cited in the office action. Gendron et al. was not cited or relied upon in the rejection mailed June 6, 2008, so these arguments are moot.

Rejections or objections not reiterated from the previous office action are hereby withdrawn.

Conclusion

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Thursday 8-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615